

## **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/528,260B  
Source: IFwo  
Date Processed by STIC: 9/25/06

**ENTERED**



IFWO

## RAW SEQUENCE LISTING

DATE: 09/25/2006

PATENT APPLICATION: US/10/528,260B

TIME: 15:10:49

Input Set : N:\AMC\Sequence Listing, P1983R1.txt  
 Output Set: N:\CRF4\09252006\J528260B.raw

3 <110> APPLICANT: Chiu, Henry  
 4 Clark, Hilary  
 5 Dennis, Kathryn  
 6 Fong, Sherman  
 7 Schoenfeld, Jill R.  
 8 Wood, William I.  
 9 Wu, Thomas D.  
 11 <120> TITLE OF INVENTION: Compositions And Methods For Treating Immune Disorders  
 13 <130> FILE REFERENCE: P1983R1  
 15 <140> CURRENT APPLICATION NUMBER: US 10/528,260B  
 16 <141> CURRENT FILING DATE: 2005-03-16  
 18 <150> PRIOR APPLICATION NUMBER: US 60/411,392  
 19 <151> PRIOR FILING DATE: 2002-09-16  
 21 <150> PRIOR APPLICATION NUMBER: PCT/US03/029097  
 22 <151> PRIOR FILING DATE: 2003-09-15  
 24 <160> NUMBER OF SEQ ID NOS: 506  
 26 <210> SEQ ID NO: 1  
 27 <211> LENGTH: 972  
 28 <212> TYPE: DNA  
 29 <213> ORGANISM: Homo sapiens  
 31 <400> SEQUENCE: 1  
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 34 acctgtcgcc tgtggctgaa ctccaggcac tcgcgtcagg tacttctgct 100  
 36 ccaggatagc ttatgaatt gctctgacag catcatcaat ggttccttc 150  
 38 gtgcgcggc ctttattcat gaggctcagg tcggggaaag actgatggc 200  
 40 cactgtgaca gcaagacagg taatgcaa atcggattca tctgggtggg 250  
 42 tccagataac agactgctag agccggataa agagatggaa aactttacg 300  
 44 tggcacaa tggaaagtctg gttatagaaa gccctcggt tgaggatgct 350  
 46 ggagtgtatt cttgtatcg aatgaataag caacgcctgt taaatgaaac 400  
 48 tggcacgtc acaataaatg tgagcaattt cactgtaagc agatcccatt 450  
 50 ctcatgaggg attaacaca gctttacca ctcttgctgc ttgcgtggcc 500  
 52 agtatcggtt tggtaactttt gtacctctat ctgactccat gcccctgcaa 550  
 54 gtgtaaaacc aagagacaga aaaatatgt acaccaaagc aatgccatt 600  
 56 catcgattct cagtccctggc cccgcgtatgt atgcctccgc tggtaacgg 650  
 58 aaggcagggt caggtaaaag agtgggttt ttggAACCCC tgaaggatac 700  
 60 tgcagcaggc cagaacggga aagttaggtt ctttcccgac gaggcagtga 750  
 62 tagctgaggc catcctaaag tccacgaggc gggaaatctga ctcagattca 800  
 64 gtcaattcag tggtaactttt cacacccatgtt gtggcggtcca cttaaatttgt 850  
 66 gcttatattt gtatgtatc ataatttaat ctgttcatat ttaactttgt 900  
 68 gtgtggtctg caaaataaac agcaggacag aaaaaaaaaaaaaaaa 950  
 70 aaaaaaaaaaaaaaa aa 972  
 72 <210> SEQ ID NO: 2  
 73 <211> LENGTH: 4573

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## RAW SEQUENCE LISTING

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Input Set : N:\AMC\Sequence Listing, P1983R1.txt

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 75 <213> ORGANISM: Homo sapiens  
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 80 gcctggacc ttgcgtgag gctgcgcggg gccgaggccg cctccgagcg 100  
 82 ccaggttat tcagtcacca tgaagctgct gctgctgcac ccggccttcc 150  
 84 agagctgcct cctgctgacc ctgcttgct tatggagaac cacccctgag 200  
 86 gtcacacgctt catccctggg tgcaccagct atcagcgcgt cctccttcc 250  
 88 gcaggatcta atacatcggt atggcgaggg tgacagcctc actctgcagc 300  
 90 agctgaaggc cctgctcaac cacctggatg tggagtggg ccgggttaat 350  
 92 gtcacccagg acgtgcaagg acacagggaa ctctccacgt gcttttagtc 400  
 94 tggagaccc ttcactgccc acaatttcag cgaggcgtcg cggttggga 450  
 96 gcagcgagct ccaggagttc tgccccacca tcctccagca gctggattcc 500  
 98 cgggcctgca cctcgagaa ccaggaaaac gaggagaatg agcagacgga 550  
 100 ggaggggccg ccaagcgtg ttgaagtgtg gggatacggg ctccctctgt 600  
 102 tgaccgtcat ctccctctgc tccctctgg gggccagcgt ggtcccttc 650  
 104 atgaagaaga cctttacaa gaggctgctg ctctacttca tagctctggc 700  
 106 gattggAACCC ctctactcca acggcccttt ccagctcatc ccggaggcat 750  
 108 ttggtttcaa ccctctggaa gattattatg tctccaagtc tgcagtggg 800  
 110 tttgggggct tttatctttt cttttacaa gagaagatct tgaagattct 850  
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 114 agtcgcttcc ctccaagaag gaccaggagg aggggggtat ggagaagctg 950  
 116 cagaacgggg acctggacca catgattctt cagcaactgca gcagttagct 1000  
 118 ggacggcaag ggcgcctatgg tggacgagaa ggtcattgtg ggctcgctct 1050  
 120 ctgtgcagga cctgcaggct tcccagagtg ctgtctactg gctgaaaggt 1100  
 122 gtccgctact ctgatatcggt cactctggcc tggatgtatca ctctgagcga 1150  
 124 cggcctccac aatttcatcg atggcctggc catcggtgt tccttcactg 1200  
 126 tgtcagttt ccaaggcata agcacctcg tggccatctt ctgtgaggag 1250  
 128 ttccccacatg agctaggaga ctttgtcatc ctgtcaacg ctggatgag 1300  
 130 catccaacaa gctctttct tcaacttctt ttctgcctgc tgctgctacc 1350  
 132 tgggtctggc ctggccatc ctggccggca gccacttctc tgccaaactgg 1400  
 134 atttttgcgc tagctggagg aatgttctt tataatttctc tggctgatata 1450  
 136 gttccctgag atgaatgagg tctgtcaaga ggatgaaagg aaggccagca 1500  
 138 tcttgattcc atttatcatc cagaacctgg gcctcctgac tggattcacc 1550  
 140 atcatggtgg tcctcaccat gtattcagga cagatccaga ttgggttaggg 1600  
 142 ctctgccaag agcctgtggg actggaaagtc gggccctggg ctgcggatc 1650  
 144 gccagcccgaa ggacttacca tccacaatgc accacggaaag aggccgttct 1700  
 146 ataaaaaaact gacacagact gtattcctgc attcaaatgt cagccgtttg 1750  
 148 taaaatgttg tattcttagga ataagctgcc ctgttaacca gtctctagct 1800  
 150 agtgccttcc gccctcttcc caccccttt tctctcgtg actctgaaac 1850  
 152 ctgaatgcag cttacaagac aaggctgact ttttctctg attaccttgg 1900  
 154 cctcccttgc gaaccagtgc tggaaagggtt tgaatccctt acccaacaat 1950  
 156 gaaaaaaaaatggc agccaatggg tataacttgg ctagaaatata caagagttga 2000  
 158 atccatagtg tggggcccat gactctagct gggcaccttg gacccctcagc 2050  
 160 tggccaatag aagagacagg agacagggaa cttcccatt ttttcaaagt 2100  
 162 ctgtttaattt gccttattact tctctcaac agaacctgaa gtcagaacac 2150  
 164 atgagcaggg tgagagggtga ggcaagggttc atcctgaatg ggagagaaag 2200  
 166 tcgaaccact gctgtgtgtc ttgtcaggat gctcaattgt tcctactgag 2250  
 168 atgctggata ttgatTTTGT aacagcacct ggtgtttcac ggctgtccga 2300

## RAW SEQUENCE LISTING

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Input Set : N:\AMC\Sequence Listing, P1983R1.txt  
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170  gtgagctaac gtggcggtgt ggctgcctgg accccttct tcaggtaac 2350
172  gctgacagaaa tggaggctca ggctgtctgc aagaaaacag ttggtttggc 2400
174  tgtgatttg accctcctt ccccactgcc atcttctaag agactttgt 2450
176  gctgcctctt agaagcacat tctgagcaca tttgagacct ctgtgttaga 2500
178  ggggagactg cacaactat cctccccag gttgagacgt ctgcagagt 2550
180  gcaagctgac ttgttagaaat ggggtgcctt ttatgctcta cttagacaag 2600
182  ggtaatcaga aatggaatca gtgcaggcaa aatttaggat ttgcgcgttc 2650
184  cataaatcaa agcatgacta atagggggtc tctgaaatgt aagggcacaa 2700
186  acttcactta gggcatcgca gatgtttca gaatggttgg cctaattgatt 2750
188  atgctacaga tgggtttaa atgaccgcgt taggtactg cttccttgca 2800
190  aaaaaagtcg aatcctgcat tgaattgaat atgaatttct ctaactctct 2850
192  ccagaaaaatg gatggagata acttgtctt aaaactgtag gccagcctta 2900
194  gccactgtgg agcccttgcc tccgagctct ggcttcaagg ggagcttttc 2950
196  tccaggttca ctagtgaat tgatttatta ttatcatatt gataatgtga 3000
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200  ggtgcccaca gttggagccc agggggccatg tttgcaact gattcatgtg 3100
202  catggctgac aggagtaactg gttcactacc aatgccttag ctttctctt 3150
204  acatagaaaaa actgtccact ctcagtaatc acaagcagca tccgtttgt 3200
206  tttctcttct tgggagacat ctgtcaacc aggaatattc ttgaaaagaa 3250
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210  cttgcctgtt ggcttcaata catttgagaa tacgctgaag agggaaaatt 3350
212  tcaagtatgg agattctaga ttaaatatca ggactgattt cctggtggga 3400
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218  tctgttttat tttctcaag ctgcatttcag gagctagcag aaaataactc 3550
220  aaagttgaag actcttggaaat ttttgcctt aacctactc gcattgatgt 3600
222  attaaattta taatttttagc attcccaata gatccatca tcccttaaac 3650
224  ataataccct ttgtcttggaa gttagataact aagtttagt tagtggattt 3700
226  ctatgtttagg agaggagctc aaaactataa tctttaacaa attgaaaaat 3750
228  gaaatagggt gtttccctt tttgtgcaca cctatattac cttaaaaat 3800
230  ttccttccat agacagctgc ctcaaaaggaa aatcctctt aaaccgtagt 3850
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234  catcgctgat cttgagtcgc cactgatgtt gcaacagct ttgcctcatg 3950
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238  tcaagcattt gtacatatta gaagtctaaag gagtagcaag tcagtggag 4050
240  gacttttca cccctggcat tagcagcttc gacccatctt tccagatgca 4100
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248  attggagctt ttcttcactg gtccttaacc ttgggttttaaaagaaggc 4300
250  ttctctgttt gggtagcgta agagctgagt atagtaatgc ctcttccaaa 4350
252  gagatggcaa tatgtgggc atctacttta aaacaaagtt gtctgatttt 4400
254  tgcaagagag gtttaggattt tattgttctt atttccctt acagttctgc 4450
256  agttccatca cagtattttt ttaataact caggtgtatg agcagaaaatt 4500
258  agaaaaagaaaa attaacttat gtggactgtatc aatgttttat ttgtaaagatt 4550
260  ctataaataaa agctatattc tgt 4573
262 <210> SEQ ID NO: 3
263 <211> LENGTH: 531
264 <212> TYPE: PRT

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## RAW SEQUENCE LISTING

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Input Set : N:\AMC\Sequence Listing, P1983R1.txt  
Output Set: N:\CRF4\09252006\J528260B.raw

265 <213> ORGANISM: Homo sapiens  
267 <400> SEQUENCE: 3  
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269 1 5 10 15  
271 Ala Ala Trp Asp Leu Ala Val Arg Leu Arg Gly Ala Glu Ala Ala  
272 20 25 30  
274 Ser Glu Arg Gln Val Tyr Ser Val Thr Met Lys Leu Leu Leu Leu  
275 35 40 45  
277 His Pro Ala Phe Gln Ser Cys Leu Leu Leu Thr Leu Leu Gly Leu  
278 50 55 60  
280 Trp Arg Thr Thr Pro Glu Ala His Ala Ser Ser Leu Gly Ala Pro  
281 65 70 75  
283 Ala Ile Ser Ala Ala Ser Phe Leu Gln Asp Leu Ile His Arg Tyr  
284 80 85 90  
286 Gly Glu Gly Asp Ser Leu Thr Leu Gln Gln Leu Lys Ala Leu Leu  
287 95 100 105  
289 Asn His Leu Asp Val Gly Val Gly Arg Gly Asn Val Thr Gln His  
290 110 115 120  
292 Val Gln Gly His Arg Asn Leu Ser Thr Cys Phe Ser Ser Gly Asp  
293 125 130 135  
295 Leu Phe Thr Ala His Asn Phe Ser Glu Gln Ser Arg Ile Gly Ser  
296 140 145 150  
298 Ser Glu Leu Gln Glu Phe Cys Pro Thr Ile Leu Gln Gln Leu Asp  
299 155 160 165  
301 Ser Arg Ala Cys Thr Ser Glu Asn Gln Glu Asn Glu Glu Asn Glu  
302 170 175 180  
304 Gln Thr Glu Glu Gly Arg Pro Ser Ala Val Glu Val Trp Gly Tyr  
305 185 190 195  
307 Gly Leu Leu Cys Val Thr Val Ile Ser Leu Cys Ser Leu Leu Gly  
308 200 205 210  
310 Ala Ser Val Val Pro Phe Met Lys Lys Thr Phe Tyr Lys Arg Leu  
311 215 220 225  
313 Leu Leu Tyr Phe Ile Ala Leu Ala Ile Gly Thr Leu Tyr Ser Asn  
314 230 235 240  
316 Ala Leu Phe Gln Leu Ile Pro Glu Ala Phe Gly Phe Asn Pro Leu  
317 245 250 255  
319 Glu Asp Tyr Tyr Val Ser Lys Ser Ala Val Val Phe Gly Gly Phe  
320 260 265 270  
322 Tyr Leu Phe Phe Phe Thr Glu Lys Ile Leu Lys Ile Leu Leu Lys  
323 275 280 285  
325 Gln Lys Asn Glu His His Gly His Ser His Tyr Ala Ser Glu  
326 290 295 300  
328 Ser Leu Pro Ser Lys Lys Asp Gln Glu Glu Gly Val Met Glu Lys  
329 305 310 315  
331 Leu Gln Asn Gly Asp Leu Asp His Met Ile Pro Gln His Cys Ser  
332 320 325 330  
334 Ser Glu Leu Asp Gly Lys Ala Pro Met Val Asp Glu Lys Val Ile  
335 335 340 345  
337 Val Gly Ser Leu Ser Val Gln Asp Leu Gln Ala Ser Gln Ser Ala

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Input Set : N:\AMC\Sequence Listing, P1983R1.txt

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338	350	355	360
340	Cys Tyr Trp Leu Lys Gly Val Arg Tyr Ser Asp Ile Gly Thr Leu		
341	365	370	375
343	Ala Trp Met Ile Thr Leu Ser Asp Gly Leu His Asn Phe Ile Asp		
344	380	385	390
346	Gly Leu Ala Ile Gly Ala Ser Phe Thr Val Ser Val Phe Gln Gly		
347	395	400	405
349	Ile Ser Thr Ser Val Ala Ile Leu Cys Glu Glu Phe Pro His Glu		
350	410	415	420
352	Leu Gly Asp Phe Val Ile Leu Leu Asn Ala Gly Met Ser Ile Gln		
353	425	430	435
355	Gln Ala Leu Phe Phe Asn Phe Leu Ser Ala Cys Cys Cys Tyr Leu		
356	440	445	450
358	Gly Leu Ala Phe Gly Ile Leu Ala Gly Ser His Phe Ser Ala Asn		
359	455	460	465
361	Trp Ile Phe Ala Leu Ala Gly Gly Met Phe Leu Tyr Ile Ser Leu		
362	470	475	480
364	Ala Asp Met Phe Pro Glu Met Asn Glu Val Cys Gln Glu Asp Glu		
365	485	490	495
367	Arg Lys Gly Ser Ile Leu Ile Pro Phe Ile Ile Gln Asn Leu Gly		
368	500	505	510
370	Leu Leu Thr Gly Phe Thr Ile Met Val Val Leu Thr Met Tyr Ser		
371	515	520	525
373	Gly Gln Ile Gln Ile Gly		
374	530		
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377	<211> LENGTH: 2181		
378	<212> TYPE: DNA		
379	<213> ORGANISM: Homo sapiens		
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386	acctaaacac agtcaccatg aagctggct gtgtcctcat ggcctgggcc 150		
388	ctctacctt cccttggtgt gctctgggtg gccagatgc tactggctgc 200		
390	cagtttttag acgctgcagt gtgagggacc tgtctgcact gaggagagca 250		
392	gctgccacac ggaggatgac ttgactgatg caagggaaac tggcttccag 300		
394	gtcaaggcct acactttcag tgaacccttc cacctgattt tgccctatga 350		
396	ctggctgatc ctccaaggtc cagccaagcc agttttgaa ggggacctgc 400		
398	tggttctgcg ctgcaggcc tggcaagact ggcactgac tcaggtgacc 450		
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402	ctccatcacc gtggataaaa aggccagacag cggcactac cactgcagt 550		
404	gcatcttcca gagccctggt cctggatcc cagaaacagc atctgttgc 600		
406	gctatcacag tccaagaact gttccagcg ccaattctca gagctgtacc 650		
408	ctcagctgaa ccccaaggcag gaagccccat gaccctgagt tgtcagacaa 700		
410	agttgcccct gcagaggtca gctgcccccc tcctcttctc cttctacaag 750		
412	gatggaagga tagtgc当地 cagggggctc tcctcagaat tccagatccc 800		
414	cacagcttca gaagatcaact ccgggtcata ctgggtgag gcagccactg 850		
416	aggacaacca agtttgaaaa cagagcccc agctagagat cagagtgcag 900		
418	ggtgcttcca gctctgctgc acctccacata ttgaatccag ctccctcagaa 950		

RAW SEQUENCE LISTING ERROR SUMMARY                    DATE: 09/25/2006  
PATENT APPLICATION: US/10/528,260B                    TIME: 15:10:50

Input Set : N:\AMC\Sequence Listing, P1983R1.txt  
Output Set: N:\CRF4\09252006\J528260B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:199; Xaa Pos. 17  
Seq#:212; N Pos. 1358  
Seq#:224; N Pos. 149,164  
Seq#:234; N Pos. 422,847,856,872  
Seq#:273; N Pos. 2530  
Seq#:313; N Pos. 2741  
Seq#:314; Xaa Pos. 910  
Seq#:322; N Pos. 124  
Seq#:383; Xaa Pos. 327  
Seq#:400; N Pos. 37  
Seq#:401; N Pos. 779  
Seq#:406; N Pos. 20,42,49,791,822,837  
Seq#:409; N Pos. 475,489  
Seq#:469; N Pos. 1973,1984,2116,2119,2120,2121,2134,2160,2180,3170,3172  
Seq#:469; N Pos. 3198,3209,3210,3211  
Seq#:471; N Pos. 38,64  
Seq#:472; Xaa Pos. 13,22

**VERIFICATION SUMMARY**

DATE: 09/25/2006

PATENT APPLICATION: US/10/528,260B

TIME: 15:10:50

Input Set : N:\AMC\Sequence Listing, P1983R1.txt  
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L:20650 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:199 after pos.:15  
L:22238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:212 after pos.:1350  
L:23594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:224 after pos.:100  
M:341 Repeated in SeqNo=224  
L:24174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:234 after pos.:400  
M:341 Repeated in SeqNo=234  
L:27777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:273 after pos.:2500  
L:33358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:313 after pos.:2700  
L:33579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:314 after pos.:900  
L:34733 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:322 after pos.:100  
L:40726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:383 after pos.:315  
L:42335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:400 after pos.:0  
L:42402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:401 after pos.:750  
L:42816 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:406 after pos.:0  
M:341 Repeated in SeqNo=406  
L:42959 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:409 after pos.:450  
L:50421 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:469 after pos.:1950  
M:341 Repeated in SeqNo=469  
L:50750 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:471 after pos.:0  
M:341 Repeated in SeqNo=471  
L:51057 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:472 after pos.:0  
M:341 Repeated in SeqNo=472